Response to Office Action dated: January 2, 2008

Attorney Docket: LCS-105/PCT/US

AMENDMENT TO THE CLAIMS

Please amend the claims as follows:

- 1. (Currently Amended) A curable mold release composition comprising:
 - a) a non-volatile organic (non-VOC) carrier composition; and
- b) a curable component comprising a combination of at least one cross-linker selected from a monomeric, cyclic, oligomeric or polymeric silazane; an amino-functional silazane; an enoxy functional silazane; a silicon hydride; an amino functional silane without alkoxy functionality; a tris methylamino functional silane; a methylethylketoxime functional silane; an acetoxy functional silane; a tris enoxy functional silane; and combinations thereof; and at least one polyfunctional siloxane;

wherein said mold release composition when applied as a coating cures to a durability which permits at least five releases without transfer of mold release composition to a part.

- (Original) The composition of claim 1, further comprising a volatile organic carrier in combination with said non-VOC carrier composition to form a low-volatile organic (low-VOC) carrier composition.
- (Original) The composition of claim 1, wherein said curable component is selected from the group consisting of moisture curable; heat curable; and combinations thereof.
- 4. (Original) The composition of claim 1, having a gloss value of at least 80 as measured by a 60 degree gloss meter.
- 5. (Original) The composition of claim 4, having a durability when cured which permits at least five releases without measurable loss of said gloss value.

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 (Original) The composition of claim 1, wherein said non-VOC carrier composition comprises a compound selected from the group consisting of branched, linear or cyclic siloxanes having 2-6 silicon atoms; branched, linear or cyclic fluorinated alkanes; and combinations thereof.

Cancelled

 (Original) The composition of claim 6, wherein said siloxane carrier is selected from the group consisting of hexamethyldisiloxane, octamethyltrisiloxane, cyclotetrasiloxane, octamethylcyclotetrasiloxane, decamethyltetrasiloxane, decamethylcyclopentasiloxane and combinations thereof.

9 Cancelled

- (Currently Amended) The composition of claim 1, wherein said non-VOC carrier composition is present in amounts of about 95 99% to about 99.8% by weight of the total composition.
- 11. (Original) The composition of claim 6, wherein said siloxane carrier does not react with said curable component.
- 12. (Currently Amended) The composition of claim 1, wherein said polyfunctional siloxane is one or more compounds of the formula:

$$P_1 \longrightarrow \begin{matrix} R_1 \\ S_1 \\ S_1 \\ R_2 \end{matrix} \longrightarrow \begin{matrix} R_3 \\ S_1 \\ S_1 \\ S_1 \\ R_4 \end{matrix} \longrightarrow \begin{matrix} R_5 \\ S_1 \\ S_1 \\ R_6 \end{matrix} \longrightarrow \begin{matrix} R_5 \\ S_1 \\ R_6 \end{matrix}$$

wherein R₁, R₂, R₃, R₄, R₅, and R₆ <u>are</u> may-be the same or different and <u>can</u> may be alkyl, aromatic hydrocarbon, organo-amine, fluorinated hydrocarbon, organo-alkoxy, hydro, organo-mercapto, organo-chloro, organo-cyano, or allyl; P₁ and P₂ <u>are</u> may-be the same or different and <u>can</u> may be alkyl, hydroxyl, hydro, allyl, carbinol, amino, acetoxy, alkoxy, enoxy, or oxime groups; and wherein n=0-100,000.

 (Original) The composition of claim 1, wherein said polyfunctional siloxane is a hydroxy-terminated polydimethyl siloxane having an average molecular weight of about 200 to about 400.000.

Cancelled

- 15. (Original) The composition of claim 1, having a room temperature solvent evaporation range of about 0.01 to about 1,000,000.
- 16. (Currently Amended) The composition of claim 1, having a <u>non-catalyzed</u> room temperature cure time <u>until formation of a mold release coating in the</u> range of about 2 minutes to about <u>6</u> [[48]] hours.
- 17. (Original) The composition of claim 1, wherein said polyfunctional siloxane has a viscosity of about 50 to about 2,000,000 cps at room temperature.
- 18. Cancelled
- 19. (Original) The composition of claim 1, further including a moisture catalyst.
- 20. Cancelled
- 21. (Original) A curable mold release composition comprising: a) a carrier

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composition comprising a compound selected from the group consisting of branched, linear, or cyclic siloxanes having 2-6 silicon atoms; and b) a curable composition comprising an amino-functional silazane and a polyfunctional siloxane, wherein said carrier is present in amounts of about 90% to about 99.8% by weight of the total composition.

- 22. (Currently Amended) A method of preparing a curable mold release composition comprising: a) providing a carrier composition; and b) mixing the carrier composition with a curable composition comprising at least one cross-linker selected from a monomeric, cyclic, oligomeric or polymeric silazane; an amino-functional silazane; an enoxy-functional silazane; a silicon hydride; an amino functional silane without alkoxy functionality; a tris methylamino silane; a methylethylketoxime functional silane; an acetoxy functional silane; an enoxy functional silane; and combinations thereof; and at least one polyfunctional siloxane.
- 23. (Original) The method of claim 22, wherein the step of providing a carrier composition comprises providing a composition comprising a compound selected from the group consisting of branched, linear, or cyclic siloxanes having 2-6 silicon atoms; branched, linear or cyclic fluorinated alkanes; and combinations thereof.
- 24. (Currently Amended) A method of preparing a mold release coating comprising the steps of:

preparing a)—applying a mold release composition comprising: i) a carrier composition comprising a compound selected from the group consisting of branched, linear or cyclic siloxanes having 2-6 silicon atoms; branched, linear or cyclic fluorinated alkanes; and combinations thereof; and ii) a curable component comprising a combination of at least one cross-linker selected from a silazane; an amino-functional silazane; an enoxy-functional silazane; an amino functional silane without alkoxy functionality; a tris methylamino functional silane; a methylethylketoxime functional

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silane; an acetoxy functional silane; an enoxy functional silane; and combinations thereof and at least one polyfunctional siloxane;

applying the mold release composition to a mold surface;

evaporating a portion of the carrier composition; and

b)-allowing the mold release composition to cure on the mold surface.

- 25. (Currently Amended) The method of claim 24, wherein the step of allowing the mold release composition to cure further comprises allowing the mold release composition to cure to a high gloss finish of at least 80 as measured by a 60 degree gloss meter.
- 26. (New) The method of claim 24, wherein said polyfunctional siloxane is a hydroxy-terminated polydimethyl siloxane having an average molecular weight of about 200 to about 400,000.
- 27. (New) The method of claim 24, wherein the cross-linker is selected from the group consisting of a silazane; an amino-functional silane without alkoxy functionality; an enoxy-functional silane; and combinations thereof; and

the polyfunctional siloxane is one or more compounds of the formula:

$$P_1 \longrightarrow \begin{bmatrix} R_1 \\ S_1 \\ R_2 \end{bmatrix} \longrightarrow \begin{bmatrix} R_3 \\ S_1 \\ R_4 \end{bmatrix} \longrightarrow \begin{bmatrix} R_6 \\ S_1 \\ R_6 \end{bmatrix}$$

wherein R_1 , R_2 , R_3 , R_4 , R_5 , and R_6 are the same or different and can be alkyl, aromatic hydrocarbon, organoamine, fluorinated hydrocarbon, organo-alkoxy, hydro, organo-mercapto, organo-chloro, organo-cyano, or allyl, P_1 and P_2 are the same or different and can be hydroxyl, hydro, or alkoxy; and n is 0 to 100,000.

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28. (New) The composition of Claim 1 wherein the cross-linker is selected from the group consisting of a cyclic silazane; an amino-functional silane without alkoxy functionality; and combinations thereof.

29. (New) The composition of Claim 1 wherein the carrier composition comprises a compound selected from the group consisting of branched, linear or cyclic siloxanes having 2-6 silicon atoms; branched, linear or cyclic fluorinated alkanes; and combinations thereof;

the cross-linker is selected from the group consisting of a cyclic silazane; an amino-functional silane without alkoxy functionality; a tris enoxy functional silane; and combinations thereof; and

the polyfunctional siloxane is one or more compounds of the formula:

wherein R_1 , R_2 , R_3 , R_4 , R_5 , and R_6 are the same or different and can be alkyl, aromatic hydrocarbon, organo-amine, fluorinated hydrocarbon, organo-alkoxy, hydro, organo-mercapto, organo-chloro, organo-cyano, or allyl; P_1 and P_2 are the same or different and can be hydroxyl, hydro, or alkoxy; and n is 0 to 100,000.

30. (New) The composition of Claim 1 wherein the cross-linker is selected from the group consisting of a cyclic trisilazane; a tris methylamino functional silane; a tris enoxy functional silane: and combinations thereof.